

CLAIMS

1. (Previously Presented) A method comprising:

pre-scanning one or more portions of a document with an optical sensing device to determine an effective region of the optical sensing device that corresponds to the scanned document;

scanning at least a first portion of the document to produce induced charges in the optical sensing device;

shielding a front region and a post region of the optical sensing device from light when scanning the document;

fetching the induced charges corresponding to the front region and the effective region for the first portion of the document;

transferring the induced charges corresponding to the post region produced when scanning the first portion of the document to the front region for use when scanning a second portion of the document, wherein the shielding inhibits an overflow of induced charges in the front region when scanning the second portion of the document; and

processing the induced charges corresponding to the effective region to form at least a piece of an image associated with the document.

2. (Previously Presented) The method as recited in claim 1, wherein the front region and the post region are located at two sides of the effective region.

3. (Previously Presented) The method as recited in claim 1, wherein the optical sensing device comprises an optical charge coupled device (CCD).

4. – 9. (Canceled)

10. (Previously Presented) The method of claim 1, further comprising sequentially reading the induced charges corresponding to the front region and the effective region without reading induced charges corresponding to the post region.

11. (Previously Presented) The method of claim 1, wherein processing the induced charges corresponding to the effective region to form at least the piece of the image associated with the document further comprising discarding the induced charges associated with the front region of the optical sensing device.

12. (Previously Presented) The method of claim 1, further comprising adding the induced charges transferred from the post region to induced charges generated by the front region in the scan of the second portion of the document.

13. (Previously Presented) The method of claim 1, further comprising determining that at least another portion of the document is to be scanned; and scanning another portion of the document to determine at least another piece of the image associated with the document.

14. (Previously Presented) The method of claim 13, further comprising generating the image associated with the document from pieces of the image formed from the processing of the induced charges.

15. (Previously Presented) A method comprising:
pre-scanning one or more portions of a document with a sensing device to determine an effective region of the sensing device that corresponds to the scanned document;
detecting light with the sensing device when scanning at least a first portion of the document, the sensing device including the effective region and one or more non-document regions;
shielding at least one of the non-document regions of the sensing device from light when scanning the document, wherein the shielding inhibits an overflow of induced charges in at least one of the non-document regions when scanning a second portion of the document;
reading data corresponding to the light detected in the effective region of the sensing device without reading at least some data corresponding to light detected in at least one non-document region of the sensing device; and

generating a scanned image associated with the document, at least in part, from the data corresponding to the effective region of the sensing device.

16. (Previously Presented) The method of claim 15, further comprising:

defining a front region in the sensing device according to a width of the document to be scanned; and

defining a post region in the sensing device according to the width of the document to be scanned, where the front region and the post region are adjacent to the effective region.

17. (Previously Presented) The method of claim 16, further comprising sequentially reading data corresponding to the light detected in the front region and the effective region without reading data corresponding to light detected in the post region.

18. (Previously Presented) The method of claim 16, wherein generating the scanned image associated with the document further comprising:

discarding the data associated with the front region of the sensing device; and
processing the data associated with the effective region of the sensing device to generate the scanned image.

19. (Previously Presented) The method of claim 16, further comprising associating at least some data from a scan of the first portion of the document to data from a scan of a second portion of the document.

20. (Previously Presented) The method of claim 19, wherein associating at least some data from the scan of the first portion of the document to data from the scan of the second portion of the document further comprises transferring the data from the scan of the first portion of the document corresponding to the post region to the front region of the sensing device for use during the scan of the second portion of the document.

21. (Previously Presented) The method of claim 20, further comprising adding the data transferred from the post region to data generated by the front region in the scan of the second portion of the document.

22. (Previously Presented) A device comprising:

a sensing device configured to detect light when at least a portion of a document is scanned, wherein the sensing device is configured to pre-scan one or more portions of a document with a sensing device for determining an effective region of the sensing device that corresponds to the scanned document, and wherein the sensing device includes the effective region and one or more non-document regions;

a shielding device configured to inhibit at least one of the non-document regions of the sensing device from receiving light when scanning the portion of the document, wherein the shielding device prevents an overflow of induced charges in at least one of the non-document regions when scanning another portion of the document; and

a control unit configured to read data corresponding to the light detected in the effective region without reading data corresponding to light detected in at least one of the non-document regions, and generate at least a portion of a scanned image associated with the document from the data corresponding to light detected in the effective region.

23. (Previously Presented) The device of claim 22, wherein the one or more non-document regions further comprise a front region and a post region defined according to the width of the document to be scanned.

24. (Previously Presented) The device of claim 23, wherein the control unit is operable to discard the data associated with the front region of the sensing device, and process the data associated with the effective region of the sensing device to generate the scanned image.

25. (Previously Presented) The device of claim 23, wherein the control unit is operable to transfer the data from the scan of a first portion of the document corresponding to the post region to the front region of the sensing device for use during a scan of the other portion of the document.

26. (Previously Presented) The device of claim 25, wherein the control unit is operable to add the data transferred from the post region to data generated by the front region in the scan of the other portion of the document.